DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-025301 Address: 333 Burma Road **Date Inspected:** 14-Jul-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Corporation, Ltd (ZPMC), Changxing Island Location: Shanghai, China

CWI Name: CWI Present: Yes Mr. Mai Quin Li No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Bike Path Components

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Delbert Humphrey was present during the times noted above for observations relative to the work being performed at ZPMC.

WELDING OBG Bay # 14

This QA observed the following components in this bay, OBG, Steel Barriers. This QA observed no work being performed on the above mentioned components during the time QA was present.

OBG Bay #16 WELDING

This QA Inspector observed the following work in progress:

FCAW welding of weld identified as E5-B-SKYWAY-1-157, located on Steel Barrier E5-B-SKYWAY-1. Welder is identified as 062757. ZPMC Quality Control (QC) is identified as Mr. Mai Quin Li. The welding variables recorded by QC appeared to comply with WPS-FCAW-1F-ESAB.

OBG Bay # 19 WELDING

This QA Inspector observed the following work in progress:

FCAW welding of weld identified as BK23A9-001-022, located on Bike Path, BK23A9-001. Welder is identified

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as 062808. ZPMC Quality Control (QC) is identified as Mr. Peng Wen Jun. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

FCAW welding of weld identified as BK23A3-001-014, located on Bike Path, BK23A3-001. Welder is identified as 06257. ZPMC Quality Control (QC) is identified as Mr. Peng Wen Jun. The welding variables recorded by QC appeared to comply with WPS-B-T-2231-ESAB.

OBG Bay # 13

WELDING

This QA observed the following components in this bay, OBG, Steel Barriers. This QA observed no work being performed on the above mentioned components during the time QA was present.

Bay #19

NDT

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 09712.

This QA inspector performed Magnet Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. Time of inspection was 15:15 hours. The members are identified as follows OBG Component. The weld designations reviewed are as follow: BK23A3-001-014, BK23A3-001-015, BK23A3-001-017, BK23A3-001-038, BK23A3-001-039, BK23A3-001-044, BK23A3-001-045, BK23A3-001-005, BK23A3-001-006, BK23A3-001-016, BK23A3-001-017, BK23A3-001-034, BK23A3-001-035, BK23A3-001-044, BK23A3-001-063, BK23A3-001-064, BK23A3-001-066, BK23A3-001-067.

Bay #19

NDT

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 09700.

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. Time of inspection was 10:00 hours. The members are identified as follows OBG Component. The weld designations reviewed are as follow: BKSA9-001-001~004, added on in the field.

Description of Incident: During the Quality Assurance (QA) NDT inspection of an OBG Bike Cantilever Truss BKSA9A, is in Bay 16, this QA Inspector discovered the following issues. This weld was retested on this date to verify indications and to generate a Incident Report:

- -1st Class "A" indication measuring 20mm in length.
- -The Indication rating is -3.9db.
- -The depth of the indication is approximately 21.76mm.
- -The weld joint is identified as BKSA9-001-001.
- -The weld joint is a Complete Joint Penetration (CJP) groove weld joining BKX80C-Top Plate to BKX80A-Side Plate, BKSA9-001-001~004.

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- -The thickness of the BKX80A-Top Plate is 22mm.
- -The X location is +10.
- -The Y location is approximately 269mm.
- -The indication is clearly marked on or near the weld.
- -BKSA9A is currently located in Bay 16.
- -2nd Class "A" indication measureing 25mm in length.
- -The Indication rating is -4db.
- -The depth of the indication is approximately 21.76mm.
- -The weld joint is identified as BKSA9-001-001.
- -The weld joint is a Complete Joint Penetration (CJP) groove weld joining BKX80C-Top Plate to BKX80A-Side Plate, weld #BKSA9-001-001~004.
- -The thickness of the BKX80A-Top Plate is 22mm.
- -The X location is +10.
- -The Y location is approximately 269mm.
- -The indication is clearly marked on or near the weld.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.





Summary of Conversations:

No relevant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Humphrey, Delbert Quality Assurance Inspector

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Reviewed By: Hall,Steven QA Reviewer